

## **REMARKS**

The above amendments and these remarks are responsive to the non-final Office action dated June 1, 2007, and are being filed under 37 C.F.R. § 1.111. Claims 41-60 and 62-64 are pending in the application, with claims 47 and 54 being withdrawn from consideration. In the Office action, the Examiner (1) objected to claim 58, indicating that the claim would be allowable if rewritten in independent form; and (2) rejected claims 41-57, 59, 60, and 62-64 under 35 U.S.C. § 102(b) or § 103(a) as being anticipated by or obvious over U.S. Patent No. 5,314,485 to Judet ("Judet").

Applicants traverse the rejections, contending that all of the claims are patentable over the cited reference. Nevertheless, to expedite the issuance of a patent and to more particularly claim aspects of the invention that applicants would like to patent now, applicants have (1) canceled claim 42 without prejudice; (2) amended claims 41, 43-46, and 64; and (3) added new claims 96-100. However, applicants reserve the right to pursue the canceled claim and/or any of the amended claims, in original or amended form, at a later time. Furthermore, applicants have presented remarks showing that all of the claims are patentable over the cited reference. Accordingly, applicants respectfully request reconsideration of the application and prompt issuance of a Notice of Allowance covering all of the pending claims.

## **I. Claim Amendments**

The present communication amends claims 41, 43-46, and 64 and adds new claims 96-100. Exemplary support (and/or an explanation) for each amendment to an existing claim and for each new claim is presented, without limitation, in the following table:

<b><i>Claim(s)</i></b>	<b><i>Exemplary Support (and/or Explanation)</i></b>
41 (Independent)	Page 5, lines 3-7; Page 20, lines 2-7; Figure 6A
43-46 and 64	(Amended to address formal issues created by the amendment of claim 41 and/or to improve clarity)
96 (New) (Independent)	Claims 41+58 (Improves clarity)
97 (New) (Independent)	Claim 41; Page 10, lines 3-6 Figures 1, 4, and 8
98 (New) (Independent)	Claims 41+52; Page 5, lines 11-14 ; Page 11, lines 17-21
99 (New) (Independent)	Claim 41; Figure 6A
100 (New) (Independent)	Claim 41; Page 3, lines 11 and 12; Figures 1 and 6A

## **II. Claim Rejections - §§ 102 and 103**

The Examiner rejected all of the pending claims as being anticipated by or obvious over Judet. Applicants traverse the rejections, contending that all of the claims are patentable over the cited reference. Nevertheless, for the reasons set forth above, applicants have amended claims 41, 43-46, and 64. Independent claim 41 and all of its dependent claims are patentable over Judet for at least the reasons set forth below.

Independent claim 41, as amended, reads as follows in clean form:

41. (Currently Amended) A method of fusing at least two bones of a hand or a foot, comprising:

selecting a bone plate including a body portion with a bone-facing surface and further including a post extending from the bone-facing surface of the body portion;

forming a cavity defined by at least two bones of a hand or a foot, the step of forming including a step of reaming to form a portion of the cavity;

placing the bone plate into the cavity such that the body portion is received in the portion of the cavity and such that the post restricts movement of the body portion; and

attaching the bone plate to the at least two bones using fasteners.

Judet does not disclose, teach, or suggest every element of amended claim 41. For example, Judet does not disclose, teach, or suggest “reaming to form a portion of the cavity” that receives the body portion of the bone plate.

Judet involves a total prosthesis of the wrist. Figure 1 of Judet, reproduced here to facilitate review, illustrates an embodiment of the wrist prosthesis in exploded view (and labeled as “1”). Wrist prosthesis 1 comprises three elements (2, 3, and 4, respectively) that articulate with one another “to perfectly reproduce the two articulation movements of the wrist” (col. 2, lines 33 and 34). Figure 2 of Judet, which is reproduced here to facilitate review, illustrates wrist prosthesis 1 installed in an individual.

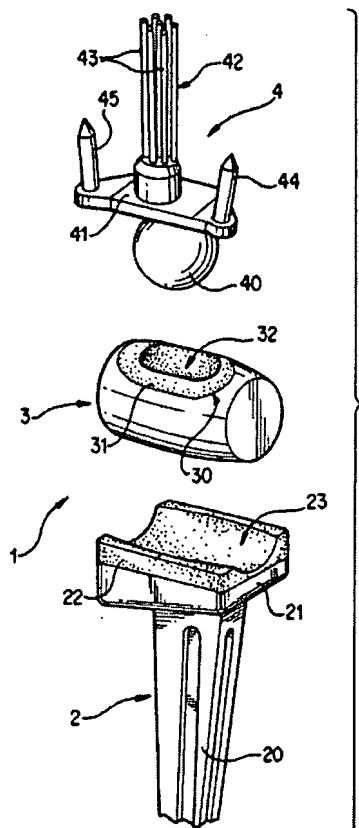


FIG. 1

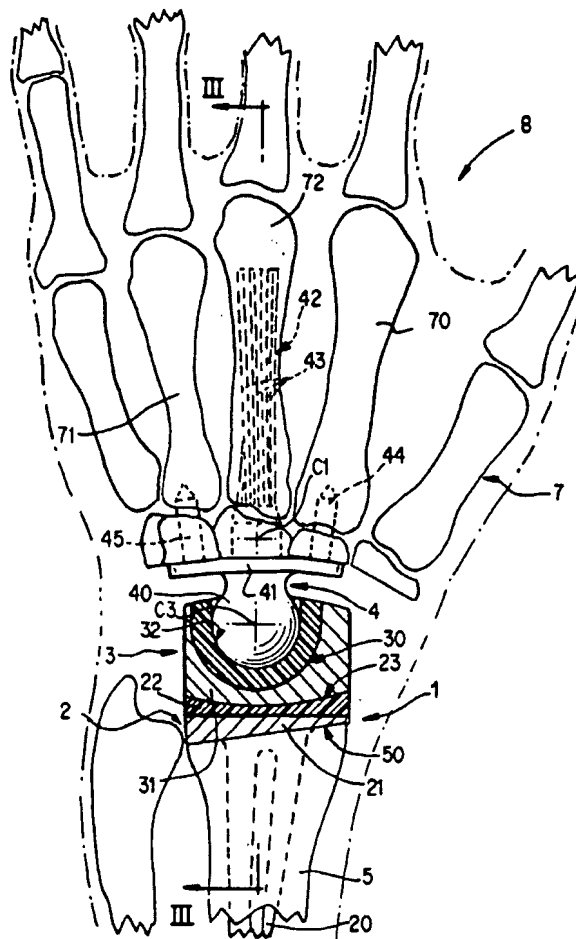
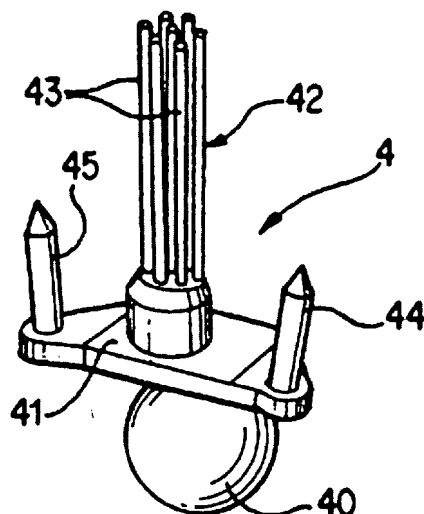


FIG. 2

When installed, first element 2 extends proximally into radius 5, third element 4 couples distally to three carpal bones and three metacarpal bones, and second element 3 is disposed between and articulates with both first and third elements 2, 4.

In the Office action, the Examiner asserted that Judet anticipates the method recited by claim 41 through installation of third element 4 of wrist prosthesis 1. An enlarged view of third element 4 from Figure 1 is reproduced here to facilitate review.



The Examiner characterized third element 4 as being a bone plate including a body portion (plate 41 of third element 4) with a bone-facing surface. In addition, the Examiner characterized shank 42 of third element 4 as being a post extending from a bone-facing surface of plate 41.

However, the present communication amends claim 41 to recite "reaming to form a portion of the cavity" that receives the body portion of the bone plate. Judet does not disclose, teach, or suggest reaming at all, and particularly not reaming to form a portion of a cavity that receives a body portion of a bone plate.

It also would not have been obvious or practical to ream the carpal bones for installation of Judet's plate 41. Reaming is performed with a rotating tool that creates a curved surface. However, plate 41 has a bone-facing surface with no substantial three-dimensional curvature. Instead, as presented in Figures 1 and 2 of Judet, the bone-facing surface of plate 41 is composed predominantly of three planar surface regions (presenting linear profiles adjacent three carpal bones in Figure 2) that meet at a pair of linear junctions (see Figure 1). Accordingly, plate 41, with its planar bone-facing surface

regions, would not properly abut reamed bone surfaces that are curved. In addition, it would not have been obvious to ream a cavity in bone for plate 41 because a circular cross-sectional area of reamer activity would not have matched the elongate footprint of plate 41 on bone, potentially damaging soft tissue dorsally and/or ventrally to the carpal bones.

In summary, Judet does not disclose, teach, or suggest every element of claim 41, and it would not have been obvious to modify Judet to meet all the limitations of claim 41. Independent claim 41 thus should be allowed. In addition, claims 43-64, which depend ultimately from claim 41, also should be allowed for at least the same reasons as claim 41.

Many of claims 43-64 add further patentable distinctions to the claimed invention that are not disclosed, taught, or suggested by Judet. For example, claim 44 recites "wherein the first and second portions of the cavity are formed in a single step." As another example, claim 52 recites "selecting a bone plate including a body portion with a bone-facing surface corresponding to a portion of a sphere." As a further example, claim 64 recites "selecting a bone plate with a body portion having a height measured parallel to a central axis defined by the post, and wherein the post extends from the bone-facing surface by a distance less than the height." With regard to claim 64, the Examiner asserted that it would only have been a matter of design choice to provide a post with the recited dimension. Applicants strongly disagree. Shank 42 of Judet, if modified according to claim 64, would barely extend into a carpal bone and would no longer extend into a metacarpal bone at all, and thus would no longer serve its intended purpose of anchoring third element 4 to bone. Applicants respectfully request that the

Examiner consider the patentable distinctiveness of the further limitations recited by claims 44, 52, 64, and each of the other dependent claims.

***III. New Claims 96-100***

The present communication adds new independent claims 96-100. Each of the independent claims is patentable over Judet for at least the reasons set forth below.

*a. Claim 96*

Claim 96 corresponds to independent claim 41 combined with dependent claim 58. However, applicants have made several modifications relative to strict combination of claims 41 and 58: applicants have (1) revised the claim structure to improve clarity, (2) deleted the “wherein” clause of claim 41, and (3) changed “at least two bones” to “at least two bones of a hand or a foot.” In the Office action, claim 58 was indicated to be allowable if rewritten in independent form. Applicants believe claim 96 should be allowed for the same reason as claim 58 rewritten in independent form.

*b. Claim 97*

Claim 97 should be allowed over Judet because the reference does not disclose, teach, or suggest every element of the claim. For example, Judet does not disclose, teach, or suggest selecting a bone plate including a body portion “with a perimeter that is circular.”

c. Claim 98

Claim 98 should be allowed over Judet because the reference does not disclose, teach, or suggest every element of the claim. For example, Judet does not disclose, teach, or suggest selecting a bone plate including a body portion “with a bone-facing surface having a shape corresponding to a portion of a sphere or cone.” Instead, as described above in relation to claim 41, Judet discloses bone plate 41 with planar bone-facing surface regions.

d. Claim 99

Claim 99 should be allowed over Judet because the reference does not disclose, teach, or suggest every element of the claim. For example, Judet does not disclose, teach, or suggest placing the bone plate “such that the post extends into a portion of the cavity defined by at least a pair of carpal bones of the hand.” Instead, as illustrated in Figure 2 of Judet, Judet discloses shank 42 of third element 4 extending into only one carpal bone.

e. Claim 100

Claim 100 should be allowed over Judet because the reference does not disclose, teach, or suggest every element of the claim. For example, Judet does not disclose, teach, or suggest placing the bone plate “such that the body portion is disposed in a recess formed selectively on a dorsal side of the at least two bones.” Instead, as illustrated in Figure 2 of Judet, plate 41 is received on carpal bones that have been modified proximally.



**IV. Conclusion**

Applicants believe that this application is now in condition for allowance, in view of the above amendments and remarks. Accordingly, applicants respectfully request that the Examiner issue a Notice of Allowance covering claims 41, 43-64, and 96-100. If there are any questions regarding this communication, or if a telephone interview would in any way advance prosecution of the application, the Examiner is encouraged to contact the undersigned attorney of record, James R. Abney, or his associate Stanley M. Hollenberg (Reg. No. 47,658), both at the telephone number listed below.

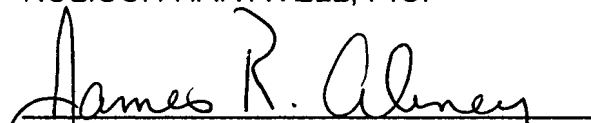
**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on September 4, 2007.

  
Christie Doolittle

Respectfully submitted,

KOLISCH HARTWELL, P.C.

  
James R. Abney  
Registration No. 42,253  
Customer No. 23581  
520 S.W. Yamhill Street, Suite 200  
Portland, Oregon 97204  
Telephone: (503) 224-6655  
Facsimile: (503) 295-6679  
Attorney for Assignee